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MASTER OF MILITARY STUDIES

TITLE: Logistics and the Fight – Lessons from Napoleon

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MILITARY STUDIES

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Executive Summary

Title: Logistics and the Fight – Lessons from Napoleon

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Thesis: Although the focus of the general is mainly on the defeat of an enemy, a military campaign will fail without equal attention given to logistics planning; logistics influence tempo, and unity of effort in logistics.

Discussion: Napoleon is one of the greatest military minds in the history of the world. Studies of his ability to anticipate his enemy, out maneuver his opponent and strike devastatingly decisive blows occurs in colleges around the world. Truly, his example is one that deserves emulation. Not just Napoleon's victories, but his failures also provide lessons learned for the military commanders of the present day. In Russia, Napoleon provided some amazing lessons in endurance, leadership and maneuver. He also provided some great lessons in logistics. The current fight in which the United States is engaged in Afghanistan is similar to the campaign of Napoleon from a logistic perspective. Both campaigns involved include large ground forces requiring tremendous logistic support far away from any familiar line of supply or supply point. In addition, traditional methods of establishing and maintaining lines of supply via seaport are unavailable. Much like Napoleon in Russia, the United States must look for both expeditionary and innovative ways to support large forces for long periods of intense, sustained operations in difficult terrain far from home and its hubs of support.

Conclusion: The French campaign in Russia in 1812 provides outstanding lessons learned for any military leader conducting operations into a faraway land. Simply put, plan your logistics, understand how battlefield decisions regarding tempo affect logistic support, and ensure unity of effort within subordinate staffs to support the mission. Napoleon, although a great leader, failed to understand this relationship.

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DISCLAIMER

THE OPINIONS AND CONCLUSIONS EXPRESSED HEREIN ARE THOSE OF THE INDIVIDUAL STUDENT AUTHOR AND DO NOT NECESSARILY REPRESENT THE VIEWS OF EITHER THE MARINE CORPS COMMAND AND STAFF COLLEGE OR ANY OTHER GOVERNMENTAL AGENCY. REFERENCES TO THIS STUDY SHOULD INCLUDE THE FOREGOING STATEMENT.

Preface

"Logistics... [Is] inextricably linked to strategy and war"[i].

"With such resources we shall devour all distances."[ii]

"All great events depend upon a single hair." – Napoleon

"An army marches on its stomach." - Napoleon

Logistics is becoming a forgotten art.

Logistics is more than just counting items, and driving them place to place. It is the art of supporting the warfighter. This paper, studying one of the most amazing ground campaigns in history, demonstrates that logistics can win or lose a fight.

A special thanks to my mentor, Dr. Robert Bruce. His sage advice served me well.

Lastly, and most importantly, I dedicate this work to my family. They are the most important thing in my life. Thank you, Christy, Nicholas, Noah and Sophie Grace. You are the best support system for a warfighter.

---

[i] Michael I. Handel, *Masters of War: Classic Strategic Thought* (London; Portland, OR: Frank Cass, 2001), 36.
[ii] David G. Chandler, *The Campaigns of Napoleon* (New York: Macmillan Publishing Company, 1966), 759.

Introduction

By examining Napoleon's Russian campaign, the United States military leaders can learn and incorporate logistic philosophies and practices to better support power projection into land-locked or traditionally inaccessible areas. Although the focus of the general is mainly on the defeat of an enemy, a military campaign will fail without equal attention given to logistics planning; logistics influence on tempo, and unity of effort in logistics.

Napoleon is one of the greatest military minds in the history of the world. Studies of his ability to anticipate his enemy, out maneuver his opponent and strike devastatingly decisive blows occurs in colleges around the world. Truly, his example is one that deserves emulation. Not just Napoleon's victories, but his failures also provide lessons learned for the military commanders of the present day. In Russia, Napoleon provided some amazing lessons in endurance, leadership and maneuver. He also provided some great lessons in logistics.

Napoleon never served as a logistician. His background in artillery provided the base for him to be a great general, but not a great logistician. Napoleon scored early victories in Europe without strong lines of supply. His army's ability to maneuver freely without regard for its sustainment gave him the ability to strike his enemies unexpectedly. This method of success laid the foundation to disregard the importance of constant supply to the largest land army in the world[1].

Background

The events leading up to the campaign of 1812 centered on a power shift occurring in Europe. After successful campaigns punctuated by the success of 1805, France established itself as the great power on the continent. As the years passed, power began to shift to Russia. Napoleon struggled to maintain control within his empire and focused his efforts in Spain and

constant threats of unrest in Austria. To maintain his influence over the eastern region of his empire, Napoleon relied on Russia, led by Tzar Alexander. This arrangement grew strained in 1809 when the Tzar ignored the mobilization of Austrian mobilization of troops. The strained relationship between Napoleon and Alexander did not help the situation as Russia became more influential[2].

Napoleon also concerned himself with his lineage. His current wife, Josephine, was barren and unable to give Napoleon a male heir to continue his pedigree. He divorced her, and took the potential marriage to his second wife as an opportunity to not only have a son, but also build diplomatic relations with his eastern neighbors. In an effort to mend relations with Russia, Napoleon courted Duchess Anna of Russia. He entered into negotiations with Tzar Alexander in to marry Duchess Anna as a means to easing the growing tension between the two continental powers. In the middle of negotiations in 1810, Napoleon surprisingly announced his intention to wed Arch Duchess Marie Louise of Austria. This sudden switch in courtship offended Tzar Alexander, and further widened the gap in relations between France and Russia. Napoleon's marriage to Arch Duchess Marie also allowed Napoleon to diplomatically isolate Russia and damage its economy[3].

The third reason for growing tension between the two countries focused on economics. In 1810, Russia allowed neutral merchant ships port access to deliver goods. This access directly violated the established continental system, which France controlled. By allowing neutral ships into its ports, and subsequently placing tariffs on the delivered goods, Russia scoffed at the economic influence of France in Europe. At the same time, France struggled to maintain its trade restrictions imposed on England, specifically its import of wheat, in 1808-1809. This behavior by Russia subverted France's efforts to maintain economic control.

Relations between France and Russia finally broke down late in 1811. Napoleon made verbal barbs toward the Tzar Alexander in an effort to entice him to war. Alexander hoped a diplomatic alternative existed, and countered Napoleon's threats with a series of diplomatic actions aimed at mustering support for Russia. In April of 1812, all diplomatic efforts on both sides stopped, and focus of effort became readying for war[4].

Preparations

The Russian campaign took place from June until December of 1812. Napoleon led his grand army on a march to destroy the Russian army, led first by Barclay de Tolley then by Mikail Kutuzov. The campaign was characteristic of Napoleon's character traits of intellect and will. The march to Moscow proved to be a great feat, but the subsequent withdrawal exposed Napoleon's failure as a commander to properly resource his army[5]. The Grand Army of Napoleon was the largest army ever assembled to that point in history. Its troop strength numbered 510,000 men[6]. By comparison, the Russian army mustered only 180,000[7]. This campaign, at its initial stage, set itself up as an overarching success for Napoleon. He found himself in a position to attack a numerically inferior opponent with an overwhelming force. His normal strategy of striking a quick, decisive blow in order to cause the enemy to sue for peace seemed suited for this endeavor.

Marshal Barclay de Tolley also began preparing his Russian force for a campaign. He took the initiative to reorganize the Russian Army into a Corps system similar to the French. Elementary logistic systems limited his efforts to remake the Russian army; however, Tzar Alexander provided some interesting insight into the Russian plan. He told Caliancourt the Russians planned not to meet the French Grand Army in open battle, but instead leverage the terrain and weather of Russia to work in Russia's favor[8]. This strategy provided Barclay the

necessary assistance to make up for any shortcomings the Russian army had in the profession or arms. Jomini, in his biography of Napoleon, "held the Russian army in the highest estimation"[9]. He also felt the Russian army would lose the will to fight if Moscow fell to the Grand Army. Then, after the taking of Moscow, conceivably the Grand Army had the opportunity to march on to St. Petersburg. These two seizures would destroy the Russian army by taking away its "center of vitality"[10] by destroying the fighting spirit of the Russian army.

The soldiers of the French Grand Army of 1812 differed from the soldiers who fought for Napoleon in his previous campaigns. A number of the soldiers were conscripts, similar to previous armies commanded by Napoleon. The difference in 1812 stemmed from experience. The conscripted soldiers lacked discipline and training to sustain the rigors of being a soldier in the ranks under Napoleon. These soldiers also were also traveling lighter than previous French soldiers who served in the Grand Army. They carried less equipment in order to afford them greater ability to march farther and faster. These laborious troop movements wore on the untrained soldiers, and pushed them further from their source of logistics[11].

Napoleon's advisors were hesitant to go to war with Russia[12]. Caulaincourt, experienced as the ambassador to Russia, led the objections. Russia posed challenges not previously faced by the Grand Army. The Grand Army was accustomed to swift decisive victories. Napoleon's staff doubted the potential of the Russian campaign to be swift based on the terrain, the Russian soldier, and the inability of the army to maintain long supply routes over the harsh Russian terrain[13].

Napoleon recognized this logistics problem, and took it upon himself to plan every detail. He poured over every available terrain map and river chart to understand how his army and its line of communication would flow across Russia. He clearly understood the few roads that

existed in Russia were in poor condition. He also understood the danger posed by the weather. Rapid changes in temperature not only threatened the soldiers, but also threatened the roads making them impassable. Lastly, the sheer size of the army demanded tremendous amounts of food and ammunition to maintain the campaign. The army supply system risked becoming overtaxed, and unable to keep pace with Napoleon's desire to cover large distances in a short time. Worst of all, even though Napoleon recognized this problem, failures in logistics became insurmountable during the campaign[14].

Horse care proved a major obstacle during the planning and execution of the campaign. Napoleon needed his horses to employ his cavalry, move his artillery, maintain lines of communication, and move supplies to the front from France. The Russian roads, due to the poor condition, restricted the ability of the French to use the horses effectively. In addition, the tundra east provided little fodder for the horses even in June at the outset of the campaign. The planning of the campaign hinged on when the land provided the best fodder for the horses. Napoleon knew his restrictions in the ability to carry horse fodder, and relied on the terrain for sustenance for his horses[15].

Mobility served as the strength of the Grand Army. In order to maintain its mobility the Army required a new system of logistic support. Napoleon's logistic system did not follow any model in existence in its time. Instead of tethering to a main line of supply, Napoleon had the ability to move freely across the battlefield utilizing his army's ability to maneuver and defeat enemy armies. This flexibility allowed Napoleon to concern himself with destruction of his enemies and not the support needed to sustain his army[16]. Napoleon's army trained for maneuver warfare. The French Army's experience in the 1796-97 campaign in Italy taught them to subsist off the local area. It became a huge advantage at this time to break free of supply lines,

and project power past the traditional limits of an army. Napoleon encouraged foraging for food as normal behavior, and expected it from his French leadership[17].

This practice created a false sense of security amongst the leaders and logisticians of the French army. The previous experiences of the French army reinforced the belief that foraging was a good practice for sustaining a large land army. This foraging influenced the commissariats, supply officers at the time of Napoleon, who turned lazy and let their logistics skills erode. Based on their collective experience, no defeat in a campaign fell solely on inadequate logistics. This lack of skill and determination, coupled with a poor distribution system set an ominous tone for the Russian campaign[18]. Specifically, the long march eastward posed great dangers to the horses. Lack of fodder would limit the ability of the cavalry to screen the army, reconnoiter and the ability to move supplies via horse drawn cart caused concern.

Neiman River Crossing

Napoleon was a great tactician who paid attention to very detail. Napoleon expressed this sentiment to Talleyrand in September 1797 when he said, "All great events depend upon a single hair"[19]. Napoleon treated the logistics of his campaign into Russia with the same attention to detail. Napoleon's initial march across Russia met little opposition. The Russians, led by Barclay, lacked the desire to engage Napoleon in battle. Fearing a massive defeat, the Russians retreated eastward. Napoleon, with his sights firmly set on the destruction of the Russian Army and the seizure of Moscow, pursued Barclay. As he moved east, Napoleon continued to lengthen his supply lines.

Marshal Murat set the pace for the French Army. He was a great general with a long personal history of battle and operational experience. He also desired to push the army forward at a break neck pace in pursuit of the Russian opponent[20]. As the leader of the cavalry, Murat

suffered greatly as the horses fell ill and died on the campaign; however, he determined to overcome this major logistic hurdle and continue the march. The command climate established by Napoleon in no doubt influenced his desire to thrust forward in pursuit if the Russians. Murat, like Napoleon, wanted to strike the decisive blow against the elusive Russian army.

Marshal Davout, also a seasoned veteran, desired to give battle. A difference between Murat and Davout was in the preparation for the campaign. He was the commander of I Corps and, in addition, one of the few marshals familiar who demonstrated logistics planning. He had great familiarity with care and feeding for troops and horses. At the onset of the campaign, he represented one of the few officers who took the time to logistically plan for the operation. He ensured each man under his command packed his rucksack a certain way to optimize its weight and storage capacity. Finally, he also ensured tradesmen with support-related skills sets such as bakers traveled with him on the march[21].

Crossing the line of departure, Napoleon and his marshals knew the impending difficulties faced by French supply lines. Napoleon issued initial orders restricting the consumption of rations until the army crossed the Neiman River. This restriction led to troops looting the countryside. Specifically, Davout experienced a lapse in discipline within his I Corps. Even with all his advanced planning, the less than adequate logistic support coupled with forced marches and scarcity of supplies eroded the discipline of Davout's corps[22].

Vilna

The logistic challenges became more evident during the Russian campaign were almost immediately after its outset. In late of June of 1812, after reaching Vilna, Napoleon realized his soldiers were out of rations. The soldiers, most new and not the hardened troops to which Napoleon was accustomed, consumed their issued four-day rations and disregarded orders to use

the rations sparingly. The Grand Army's logistic strategy of foraging, or more practically described as plundering, for supply support was the only alternative to support such a large land force[23].

At Vilna, the French strategy of looting proved unsuccessful. Vilna served as a Russian headquarters during the fall back eastward. Due to its use by the Russian army, there were not enough supplies to sustain the large army. In addition, the water supplies at Vilna were poisoned, and not fit for human consumption. These setbacks were a cause for concern, but did not deter Napoleon[24]. Napoleon pressed on eastward in pursuit of a grand battle with the Russian army.

Vietbsk

As Napoleon left Vilna, his grand army continued to suffer casualties. The lack of fodder resulted in the death of horses. The cattle in the army's marching trains were unable to maintain the pace of the march and fell out. Lastly, and most importantly, soldiers began to desert the ranks. There was little logistic support helping to sustain the soldiers, so in the minds of the soldiers an attractive option became desertion with the purpose of finding food and shelter[25]. Nevertheless, the French Army pressed eastward. This decision to press forward became critical because it marked the point where Napoleon put the importance of battle ahead of the importance of logistics. Napoleon failed to see the link between combat power and logistics. Combat power and logistics have a strong positive correlation. Combat power is not sustainable without a strong line of logistics.

To mount this type of attack the French army had to catch up the Russian army. Tempo became a huge factor the French, not just tempo of the army in battle, but also the tempo of the army in pursuit of the enemy. Quickly, the French learned this type of pace was unsustainable.

The single line of supply did not reach far past Vilna, nor did supplies flow with the velocity necessary to sustain massive troop movements deeper and deeper into Russia. It is not clear if Napoleon recognized this situation, or instead chose to ignore it and relied upon the Grand Army to overcome adversity. What is clear is that he lacked of familiarity with the logistics necessary to sustain this type of campaign.

The Grand Army's experience at Vitebsk sheds more light on the slowly changing perception of that logistics is the catalyst for combat capability. The Grand Army took an operational pause of fifteen days, focusing on the health and comfort of it forces. Napoleon made clear his intentions to care for the force, but did not put theory to practice. The push eastward did nothing to strengthen the single line of supply from west. Instead, the line of supply strained even more in its effort to support the distant, large force. In addition, there were no local supplies to be had to feed the army. When the Grand army left Vitebsk, the casualties took a significant toll with nearly one-third of the 500,000-man force unable to fight[26]. In addition, the continued loss of horses adversely affected the campaign.

Smolensk

Napoleon found himself in a position in Russia where external factors influenced his campaign's tempo more than ever in his experience. Although Napoleon controlled the tempo with his choice to press ever eastward into Russia, he began to see the effects of his tempo on his forces. Davout noted in his correspondence that the emperor recognized the need "to give the army seven or eight days rest to organize the supply service"[27]. This respite never happened, as Napoleon decided to push the army forward to Smolensk in order to prevent the unification of the two Russian armies converging there.

Smolensk became the tipping point for the logistics of the French Army. The further it moved past Vilna the more isolated the Army became and more difficult to supply from the rear[28]. The army pushed hard to Smolensk before moving to Moscow, but there was not a sustainable line of supply. Napoleon continued to encourage the use of foraging, but the land had nothing to give to the troops. The Russians continued their strategy of avoiding major contact with the Grand Army. In response, the French Army continued to move eastward, strategically withdrawing toward Moscow[29].

Smolensk fell easily to Napoleon because the Russians withdrew before Napoleon maneuvered his forces to envelop the Russian army. The major decision faced by Napoleon concerned where to winter the army. Smolensk, although not overflowing with support, provided enough logistic support to the army if it chose to rest there for the winter. In addition, the winter pause provided the line of supply time to reorganize and overcome the great distance between Vilna, the forward supply point, and Smolensk[30].

Borodino

Napoleon's victory at Smolensk left only the Russian army between him and his goal of Moscow. He saw the Borodino as one of his first real opportunities to decisively hit the Russian army, and get them to surrender. The greatest significance of the Battle of Borodino became the inability of Napoleon to pursue Barclay and the Russian army. Napoleon's victory at Borodino set the stage for the march on to Moscow. The Russian army withdrew east, and the French targeted Moscow. Napoleon missed his chance at Borodino to win the war with Russia. A weary, sick Napoleon had no choice but to push on for Moscow[31].

Scorched Earth

The "scorched earth" policy used by the Russians became a critical tactic in the war against the French. As the French moved further eastward, their line of communications stretched and strained to meet the needs of the army. The impassable roads, Cossack raids and dying horses only exacerbated the Russian tactic of destroying any source of supply or fodder before the French arrived. This destruction not only disrupted the foraging concept of the French, but it also brought morale in the ranks to new lows.

Each soldier had the responsibility of feeding himself. The reason for this practice was to allow soldiers to travel lighter, move faster and not rely on one supply hub to draw support. Since soldiers were responsible for their individual welfare, this obligation became a competing priority with orders from the chain of command. Napoleon's generals continued to see a lack of discipline in soldiers, and a disregard for orders passed down to them. This behavior was common for the French army since foraging was common practice; however, due to the protracted time and space of the Russian campaign the disregard for order and discipline became much more evident[32].

The Russian army's method of supply was not very different from the French. They too utilized foraging as they maneuvered eastward in order to avoid direct engagement with the much larger French force. A critical difference between the French and the Russians was that the Russians were taking action to disrupt the French practice of foraging. The Russian army instituted a policy of leaving nothing of logistic value along the French route of advance. This is a significant point because the Russians began, somewhat indirectly, to attack the line of supply for French army. By taking away the French army's ability to sustain itself the Russians frustrated the French[33].

Moscow

The French army overextended when it reached Moscow in September 1812, and unable to protect its single line of communication in Russia[34]. The long road from Smolensk to Moscow exemplified the scorched earth policy of the Russians. The French army limped to Moscow, and it is there where Napoleon found himself in a quandary. He had to choose between directing the army to spend the winter in Moscow, or withdraw and return to France. Interesting to note the French leadership discussed attacking the Russian logistics, but not to fortify their own lines of supply. Moscow offered no rest for the weary army of France. The French arrived to find the city decimated. Parts of Moscow burned, no foodstuffs were available, and any supplies were gone. This unfortunate turn of events in Moscow culminated the logistic trials and travails of Napoleon.

His entire strategy for moving the French army across Europe and into Russia to reach Moscow relied upon his two-fold strategy of lightening the army to move faster, and encouraging the army to forage for individual sustainment, which freed the army's tether to a single point of supply. The failure here fractured the army, and exacerbated problems the conscripted force dealt with on the march to Moscow. Desertion increased dramatically, and troop insubordination mounted to levels unseen in a professional army of France. These internal pressures surely influenced Napoleon's decision to withdraw from Moscow and return to France. The pressures brought on by a total lack of logistics resonated with the second-order effect of loss of discipline and troop desertion.

Decision to Withdraw

The withdrawal from Moscow tested every facet of the French army. It also exposed every problem the French army dealt with on its march to Moscow. All of these problems related directly to the logistic shortcomings of the French army. Desertion from the ranks

reached new highs as weak, conscripted soldiers decided their individual survival was more important than the general whom they served. Horses continued to die due to lack of fodder, and in some cases became food for starving troops. Men resorted to chewing willow bark in a desperate attempt stave off starvation[35]. One new factor, weather, highlighted the failure of the supply system for Napoleon. His march to Moscow occurred in the heat of summer, beginning in June 1812 and culminating in October of the same year. Now, his decision to withdraw his forces meant crossing the harsh tundra of Russia from east to west in the bitter cold of harsh Russian winter. Napoleon chose to cross the same scorched earth he traveled into Moscow, and now discipline waned to the point where provisions were not ready for the departure. As the army readied to leave Moscow, 40,000 carts assembled to carry looted treasure instead of the supplies for the march[36].

The weather now turned cold, and Napoleon's army was not ready for the cold weather. Men dressed in rags of their summer uniforms trekked across the frozen tundra. More importantly, the supply system supporting the force. Granted, the supply support did not have the logistic power to extend its reach to Moscow, or any further than Smolensk, but the only action taken by the supply system was to do nothing. There was no push of winter clothing for freezing troops to the warfront. In addition, requests for support continued to go unanswered. There were increases in the frequency of wagon trains; however, these trains did not reach their destination of Smolensk because the Cossacks continued to attack these lightly defended targets of opportunity[37].

Smolensk proved to be a dark period in the withdrawal from Russia. The army reached Smolensk, and broke loose looking for supplies. The foraging of the troops degraded quickly into pillage and plunder. Any order of established chain of command vanished. Men took

whatever they could, by force if necessary. The complete loss of bearing by the French army at Smolensk was the final and clearest sign to Napoleon that the army he currently commanded was not the army to which he was accustomed. Clearly, the opportunity to avoid these issues existed if proper logistic support was in place to support the French army. The distribution of needed supplies, and ammunition became a larger issue than having the supplies on hand.

Berezina

The logistic function of engineering had no support from either supply or transportation. The major contribution of engineering came during the withdrawal from Moscow. The chief of engineering, General Eblé, built bridges for the army to use as it withdrew back to France across the Berezina River. The material used to build these bridges did not come from the commissariats in response to a requisition from the engineers. Instead, hoarding the tools lumber and other material saved the armies of Napoleon[38]. Eblé had orders to destroy the bridges, but had salvaged the material and kept it, in addition to destroying the bridges. This hoarding demonstrates that not only did the supply system not work, but also that everyone knew the systems failure.

Return to France

Napoleon's army reached France a broken force. Napoleon began his campaign with 500,000 men. His command consisted of roughly 40,000 when he finally arrived home. It was an amazing achievement in that he took the largest land army ever assembled to that point in history, marched from Paris to Moscow and back and never suffered an overwhelming defeat at the hands of his Russian enemy.

Lessons Learned

One type of advisor absent from the planning of the campaign was the logistics officer, or logistics officer. Instead, the logistics for Napoleon's army functioned in three independent groups. These functions were supply, transportation, and engineering. The first function, supply, provided all material to the front. This system grew stale, inefficient, and corrupt in the years leading up to the Russian campaign. Due to the army foraging, the need for regular sustainment became almost obsolete. Therefore, the supply officers, or commissariats, grew inept and aloof. The second part of the Napoleonic logistic system was transportation. Movement of supplies traditionally occurred by horse-drawn cart, or by waterway. Waterways were not feasible due to the movement of the campaign because most of the passable waterways lay westward of the main line of operation. This left the Grand Army to rely solely on carts for cargo transport. These roads were in poor condition, and severely restricted travel of French wagons and horses. These carts lightly guarded and covering almost inconceivable distances, fell victim to Cossack raids. Most of the cargo convoys never made it to their destinations in Russia. Surely, these types of gross oversights made their way to Napoleon.

Napoleon did not plan on a winter war in Russia. His belief in the ability to maneuver and destroy the Russian army pushed him forward, and distracted him from the logistic needs of his army. He never paused to strengthen his lines of communication to account for the harsh Russian winter. In addition, Napoleon did not adjust the army's strategy of sustaining itself off the land. Clearly, this strategy was inadequate in the harsh tundra of western Russia[39].

The sheer planning involved in the logistics of a campaign is tremendous. If not done correctly the campaign will fail before it begins. Napoleon did not fully plan for the logistics of his march across Russia. This failure to plan was a direct precursor to his ultimate failure to destroy the Russian Army. An example of this failure was his decision not to hold his campaign

at Smolensk. Instead of stopping to reload his army, Napoleon continued pressing east in his quest to destroy the Russian Army. Knowing his aggressive nature and desire to utilize maneuver as a means to an end, Napoleon needed to better manage the logistics planning to support his desire to press forward[40]. He failed to place one single officer in charge of his logistics, instead believing his sheer will sufficed to manage his internal lines of communication.

Large troop movements were common to Napoleon or to any other land army in the nineteenth century. The only way to project power as a means to impose one's will on an enemy was by forming a large force and marching to battle. Napoleon also believed that there was strength in numbers. The general with the larger army had the advantage. The shortfall in this plan was the logistic support for a large army. Previous armies who had fought in Europe conducted siege warfare. In siege warfare, an army massed around an enemy garrison and slowly bled the enemy into capitulation. This type of warfare was logistically intensive. It required the care and feeding of a large force a long way from home. The danger for the army seizing an objective was distance. The line of supply, even if stretched to the seizing force, was vulnerable to attack. Therefore, an army wanting to lay siege had to take into account the distance covered by the land army. Limited power projection existed in the nineteenth century because of this constraint[41]. Napoleon, given better logistics, possessed the ability to project the power of France all the way to Moscow.

A general must have a sound logistic plan to go to war. In addition, a general is able to point to one key member of his staff, the Logistics Officer, as his single point of information. Napoleon put a great burden on himself during the Russian campaign. Although he solicited opinions from his staff he ultimately took his own thought and turned them into action. This micromanagement was most evident in the area of Logistics. Napoleon did not have this

equivalent person in his Russian campaign. There was no single person he could turn to with questions, concerns, or demands about the logistics to support his army's march into Russia[42]. He began to order his generals to reorganize the staff to compensate for his lack of logistic organization. Specifically, Napoleon directed his Chief of Staff to "charge a general officer of your staff to occupy himself solely with the organization of routes of communication from Vilkoviski to Kovno and from Kovno to Vilna"[43].

Napoleon attempted to mitigate the long, poor supply routes by lightening his army. He discarded some common ideas of bringing everything with you when you went to war. He also disregarded certain advances in technology and instead favored the use of large land forces. For Napoleon, there was safety in numbers. In an effort to make his army better, Napoleon revolutionized ground force logistics[44].

Conclusion

The current fight in which the United States is engaged in Afghanistan is similar to the campaign of Napoleon from a logistic perspective. Both campaigns involved include large ground forces requiring tremendous logistic support far away from any familiar line of supply or supply point. In addition, traditional methods of establishing and maintaining lines of supply via seaport are unavailable. Much like Napoleon in Russia, the United States must look for both expeditionary and innovative ways to support large forces for long periods of intense, sustained operations in difficult terrain far from home and its hubs of support.

In his Maxims, Napoleon stated, "An army must have but one line of operations. This must be maintained with care and abandoned only for major reasons"[45]. Napoleon believed if you abandoned your line of communication, that you risked defeat. Ironically, Napoleon never took the time to establish a line of communication for his army during its campaign in Russia.

Each problem Napoleon faced in Russia had a solution that lied in logistics. Napoleon did not face a great external challenge not from Barclay, Kutusov and the Russians. He faced internal friction of war from starving troops, dying horses, desertion, clothes to deal with inclement weather, convoys. Napoleon failed in Russia because of his logistics.

Napoleon had the misfortune of supply leaders who took a lackadaisical approach to supporting his war effort. Napoleon fostered this approach by attacking swiftly, traveling light and always probing for the decisive blow to an enemy. He sought the opportunity to strike quickly and force the enemy to capitulate. This method of warfare proved to be successful early, but failed miserably during the Russian campaign. If the logistics officer had been more assertive in his support of Napoleon's efforts, there is a high probability that Napoleon's march to Moscow would have been successful. Napoleon lamented about the sorry shape of his logistics officer, or grand provost, when he remarked, "Neither the grand provost of the gendarmes, nor the wagon-master, nor the staff officers, not one of them serves me as he ought to do"[46].

Napoleon recognized the logistics problem; however, he failed to take enough decisive action to correct it. He stayed true to his belief that his incredible will would keep the support of the war effort running. Furthermore, as the army supply system eroded, and the "every man for himself" mentality of the army drove the supply system into the ground. Worst of all, even though Napoleon recognized this problem, his inaction only let the problem fester and become insurmountable during the campaign[47]. Napoleon believed logistics, much as Clausewitz believed, fell into place as the war waged. Logistics will fall into place, but the catalyst is a battle-hardened logistician. The example of Marshal Murat leading the Grand Army eastward demonstrates that logistics will not just take care of itself as the war wages on. As troops and

horses fell out at Vilna, no one reacted to the losses. The plan because simply to continue the movement eastward in hopes of finding sustainment for the army.

Napoleon learned quickly that tempo directly related to logistic support. Napoleon and Murat continued to push the invasion of Russia forward, thereby increasing the operational tempo. First, the line of supply was incapable of maintaining any kind of sustained operation, much less one where the operational tempo continued to be increased. Second, the belief that supply support will catch up to the operational pace is false. Instead, the truth is operational tempo will only increase as quickly as allowed by the logistic support behind the operations. Therefore, the campaign failed because of the pace was unsustainable. Noting that if the French had stopped to rest more frequently, reducing the tempo that the army would have succeeded supports this thought[48]. The counter-argument is that regardless of the tempo, there was no logistic support working to catch up to the French army. If the army had stopped more frequently losses may have mounted slower. Napoleon believed in winning wars quickly. It did not make sense to wait and hold in a weak position waiting for support that is not coming.

The Russian campaign clearly demonstrates the lack of unity of effort within the French army regarding logistics. The French army indirectly divided its logistics efforts into supply, transportation and engineering. The supply support reeked of corruption, and developed a laisser-faire attitude regarding support of troops. The supply system also suffered from a long period of inactivity. Due the fighting done by the French army in previous campaigns, the practice of foraging became standard operating procedure. This practice appeared effective since the fighting took place in Europe where food and other personal supplies were more prevalent. In the frozen tundra of Russia, the French army found little to no stuff with which to sustain itself. When the requisitions went back to France, no one knew how to react, and instead acted

aloof to the predicament of the army. This poor attitude and inability to function clearly displayed itself by not being able to meet the demands of the French army as it progressed farther and farther east into Russia. The transportation operation of the French army failed to communicate its need for convoy security support during its operations in Russia. It also found itself running without the correct supplies, going to the wrong destinations and not at all engaged in bringing any kind of support forward to the warfighter. The failure of supply and transportation to work together crippled Napoleon's ability to project power eastward from France and into Russia.

The French campaign in Russia in 1812 provides outstanding lessons learned for any military leader conducting operations into a faraway land. Simply put, plan logistics, understand how battlefield decisions regarding tempo affect logistic support, and ensure unity of effort within subordinate staffs to support the mission. Napoleon, although a great leader, failed to understand this relationship.

[1] Richard K. Riehn, *1812: Napoleon's Russian Campaign* (New York: McGraw Hill Publishing Company, 1990), 138.
[2] David G. Chandler, *The Campaigns of Napoleon* (New York: Macmillan Publishing Company, 1966), 741-742.
[3] Chandler, 744
[4] Chandler, 748
[5] Jonathon P. Riley, *Napoleon as a General* (London; New York: Hambledon Continuum, 2007), 198.
[6] James Marshall Cornwall, *Napoleon as a Military Commander* (London: Penguin, 2002, c1967), 220.
[7] Carl von Clausewitz, *The Campaign of 1812 in Russia* (Westport, CT: Greenwood Press, 1977), 52.
[8] Chandler, 746, 750.
[9] Jomini, Antoine Henri Jomini, *Jomini and his Summary of the art of war; a condensed version edited, and with an introduction, by Lt. Col. J.D. Hittle* (Harrisburg [Pa.] Washington, Military Service c1958) Vol 2, 250
[10] Jomini, Vol 2, 250
[11] Todd Fisher, *The Napoleonic Wars The Empires Fight Back 1808-1812* (Oxford: Osprey Military, 2001), 54.
[12] Cornwall, 219.
[13] Jomini Vol 2, 248
[14] Riehn, 144, Chandler, 753.
[15] Chandler, 758.
[16] Reihn, 138.
[17] John A. Lynn, ed., *Feeding Mars, Logistics in Western Warfare from the Middle Ages to the Present* (Boulder, Colo. : Westview Press, 1993), 10.
[18] Reihn, 139.
[19] Colonel Vachee, *Napoleon at Work,* tr. From the French, with a foreward, by G. Frederic Lees (London, a. and C. Black, 1914), *14.*
[20] Owen Connelly, *Blundering to Glory, Napoleon's Military Campaigns* (Wilmington, Del.: SR Books, c1999), 162.
[21] Chandler, 758.
[22] Chandler, 766.
[23] Nigel Nicholson, *Napoleon: 1812* (New York: Harper & Row, c1985), 37-38.
[24] Nicholson, 39.
[25] Nicholson, 46.
[26] Connelly, 164.
[27] Cornwall, (Corr 19017) 222. *This citation is correspondence cited by Cornwall within his book*
[28] Reihn, 151.
[29] Gregory Fremont-Barnes, *Napoleon Bonaparte: Leadership, Strategy, Conflict* (Oxford; Long Island City, NY: Osprey Pub., 2010), 29.
[30] Chandler, 791.
[31] Fisher, 69.
[32] Reihn, 139.
[33] Nicholson, 46.
[34] Clausewitz, 16.
[35] Nicholson, 126.
[36] Gunther E. Rothenberg, *The Art of Warfare in the Age of Napoleon* (Bloomington, Indiana University Press, 1978), 130.
[37] Nicholson, 126.
[38] Nicholson, 149, 152. Connelly, 177.
[39] Cornwall, 227.
[40] Antoine Henri Jomini, *Jomini and his Summary of the art of war; a condensed version edited, and with an introduction, by Lt. Col. J.D. Hittle* (Harrisburg [Pa.] Washington, Military Service c1958), 96-97.
[41] Martin VanCreveld, *Supplying War: Logistics from Wallenstein to Patton,* (Cambridge; New York: Cambridge University Press, 2004), 40-41.

[42] George C. Thorpe, *George C. Thorpe's Pure Logistics: The Science of War Preparation*, (Washington DC: National Defense University Press, 1986), 14.
[43] Thorpe, 18.
[44] VanCreveld, 42.
[45] Lanza, *Napoleon and Modern War: his Military Maxims* (Harrisburg, Pa.: Military service publishing company, 1943.), 18.

[46] Thorpe, 20. (Quotation endnote from Lieutenant Colonel T. A. Dodge, U.S. Army, *Great Captains – Napoleon, Vol. III*, 425.)
[47] Riehn, 144.
[48] Fisher, 54.

Bibliography

Chandler, David G. Dictionary of the Napoleonic Wars. (New York: Macmillan, 1979.)

Chandler, David G. The Campaigns of Napoleon. (New York: Macmillan, 1966.)

Colby, Elbridge. Masters of Mobile Warfare. (Princeton, N. J., Princeton University Press, 1943.)

Connelly, Owen. Blundering to Glory: Napoleon's Military Campaigns. (Wilmington, DE: Scholarly Resources, 1987.)

Fremont-Barnes, Gregory. Napoleon Bonaparte: Leadership, Strategy, Conflict. (Oxford ; Long Island City, NY : Osprey Pub., 2010.)

Handel, Michael I. Masters of War: Classical Strategic Thought. (London ; Portland, OR : Frank Cass, 2001.)

Jomini, Antoine Henri. Jomini and his Summary of the art of war; a condensed version edited, and with an introduction, by Lt. Col. J.D. Hittle. (Harrisburg Pa., Washington, Military Service, 1958.)

Jomini, Antoine Henri. Life of Napoleon Vol. II. Tr. from the French. With notes, by H.W. Halleck. (Kansas City, Mo., Hudson-Kimberly publishing co., 1897.)

Jomini, Antoine Henri. Life of Napoleon Atlas. Tr. from the French. With notes, by H.W. Halleck. (Kansas City, Mo., Hudson-Kimberly publishing co., 1897.)

Kress, Moshe. Operational logistics: the art and science of sustaining military operations. Boston : Kluwer Academic Publishers, c2002.

Lynn, John. Feeding Mars: logistics in Western warfare from the Middle Ages to the present. (Boulder, Colo. : Westview Press, 1993.)

Marshall-Cornwall, James. Napoleon as a Military Commander. (London : Penguin, 2002, c1967.)

Morgan, John. "War Feeding War? The Impact of Logistics on the Napoleonic Occupation of Catalonia. The Journal of Military History. (Lexington: Jan 2009. Vol. 73, Iss. 1, pp. 83-116.)

Napoleon I, Emperor of the French. Napoleon and modern war: his military maxims / revised and annotated by Conrad H. Lanza. (Harrisburg, Pa. : Military service publishing company, 1943.)

Napoleon I, Emperor of the French. Napoleon on the art of war. / selected, edited, and translated by Jay Luvaas. (New York, NY : Free Press, c1999.)

Nicolson, Nigel. Napoleon 1812. (New York : Harper & Row, c1985.)

Petre, F. Lorainne. Napoleon at war : selected writings of F. Loraine Petre / edited with an introduction by Albert A. Nofi. (New York, N.Y. : Hippocrene Books, c1984.)

O'Hanlon, Michael E. The science of war: defense budgeting, military technology, logistics, and combat outcomes. (Princeton : Princeton University Press ; Washington, DC: In association with the Brookings Institution, c2009.)

Riehn, Richard. Napoleon's Russian Campaign. (New York : McGraw-Hill, c1990.)

Riley, Jonathon. Napoleon as a general. (London ; New York : Hambledon Continuum, 2007.)

Rothenberg, Gunther E. The Art of Warfare in the Age of Napoleon. (Bloomington, Indiana University Press, 1978.)

Sumida, Jon Tetsuro. Decoding Clausewitz: a new approach to on war

Taylor, Gilbert. "Napoleon as a General: Command from the Battlefield to Grand Strategy", The Booklist. (Chicago: Nov 15, 2007. Vol. 104, Iss. 6, p. 17.)

United States Marine Corps. Marine Corps Doctrinal Publication: Campaigning (MCDP)1-2 (Washington DC: United States Government, 1997)

Vachée, Colonel. Napoleon at Work. tr. from the French, with a foreward, by G. Frederic Lees. (London, A. and C. Black, 1914.)

Van Creveld, Martin. Supplying war: logistics from Wallenstein to Patton. (Cambridge ; New York : Cambridge University Press, 2004.)

Worcester, Elliot W. Joint logistics planning considerations for expeditionary forces. (Alexandria, Va. : DTIC, [1996.)